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# NOTICE OF ALLOWANCE AND FEE(S) DUE

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11/30/2009

BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP 1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040 EXAMINER

VALENTINE, JAMI M

ART UNIT PAPER NUMBER

2894

DATE MAILED: 11/30/2009

	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
Ī	10/566,522	01/27/2006	Yoshito Jin	96790P520	5835

TITLE OF INVENTION: BISTABLE RESISTANCE VALUE ACQUISITION DEVICE, MANUFACTURING METHOD THEREOF, METAL OXIDE

THIN FILM, AND MANUFACTURING METHOD THEREOF

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/01/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

## HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

## Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

(571)-273-2885 or <u>Fax</u>

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

Note: A certificate of mailing can only be used for domestic mailings of the CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 8791 11/30/2009 Certificate of Mailing or Transmission BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below. 1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040 (Depositor's name (Signature (Date APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/566,522 01/27/2006 Yoshito Jin 96790P520 5835 TITLE OF INVENTION: BISTABLE RESISTANCE VALUE ACQUISITION DEVICE, MANUFACTURING METHOD THEREOF, METAL OXIDE THIN FILM, AND MANUFACTURING METHOD THEREOF APPLN. TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1510 \$300 \$0 \$1810 03/01/2010 **EXAMINER** ART UNIT CLASS-SUBCLASS VALENTINE, JAMI M 2894 257-002000 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. (2) the name of a single firm (having as a member a ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) 4a. The following fee(s) are submitted: lssue Fee A check is enclosed. Publication Fee (No small entity discount permitted) Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_\_ (enclose an extra copy of this fo Advance Order - # of Copies \_ (enclose an extra copy of this form). 5. Change in Entity Status (from status indicated above) a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ■ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2). NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. Authorized Signature Date Typed or printed name Registration No. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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10/566,522	01/27/2006	Yoshito Jin	96790P520	5835	
8791 75	7590 11/30/2009		EXAMINER		
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1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040		ART UNIT	PAPER NUMBER		
			2894		
			DATE MAILED: 11/30/2009		

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 159 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 159 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)		
	'			
Notice of Allowability	10/566,522 <b>Examiner</b>	JIN ET AL.  Art Unit		
. Todoo o. 7 monasty	Examine	Art offic		
	JAMI M. VALENTINE	2894		
The MAILING DATE of this communication appeal claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in t ) or other appropriate commun (IGHTS. This application is su	his application. If not included ication will be mailed in due coul	se. <b>THIS</b>	
1. This communication is responsive to <u>11/16/09</u> .				
2. ☑ The allowed claim(s) is/are <u>1-3,6 and 9-50</u> .				
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority units a)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> </ul>		(f).		
2. Certified copies of the priority documents have		No		
3. ☑ Copies of the certified copies of the priority do	• •		from the	
International Bureau (PCT Rule 17.2(a)).				
* Certified copies not received:				
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	MENT of this application.			
<ol> <li>A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give</li> </ol>			CE OF	
5. CORRECTED DRAWINGS ( as "replacement sheets") must	st be submitted.			
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached				
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date	<u>.</u>			
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date				
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t			k) of	
<ol> <li>DEPOSIT OF and/or INFORMATION about the depo- attached Examiner's comment regarding REQUIREMENT</li> </ol>			the	
Attachment(s)	E   Notice of Info	rmal Datant Application		
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Dotice of Draftperson's Patent Drawing Review (PTO-948)</li> </ol>	into lice of into     interview Sur	rmal Patent Application		
	Paper No./M	ail Date		
<ol> <li>Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date <u>11/16/09</u></li> </ol>	/. ∐ Examiner's A	mendment/Comment		
Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. 🛛 Examiner's S	tatement of Reasons for Allowar	ice	
<del></del>	9. 🔲 Other			
/Bradley K Smith/				
Primary Examiner, Art Unit 2894				

Application/Control Number: 10/566,522 Page 2

Art Unit: 2894

### STATEMENT OF REASONS FOR ALLOWANCE

- 1. The following is an examiner's statement of reasons for allowance: No prior art was found that anticipates nor renders obvious the claimed subject matter of the instant application as a whole either taken alone or in combination. In particular, the prior art of record does not teach a device including a first metal oxide layer containing at least two metals, on a substrate; a first electrode on one surface of the first metal oxide layer; a second electrode on another surface of the first metal oxide layer; and an insulating layer in contact with at least one of the one surface and said another surface of the first metal oxide layer, wherein the insulating layer is between the first metal oxide layer and one of the first and second electrodes; a second metal oxide layer made of the same metal oxide, on the same substrate, and a fourth electrode on the second metal oxide layer, wherein the first electrode, first metal oxide layer, second metal oxide layer, and fourth electrode are connected in series as claimed. It would not have been obvious to one having ordinary skill in the art at the time the invention was made to do so. No prior art was found that taught this novel device.
- 2. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMI M. VALENTINE whose telephone number is (571)272-

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9786. The examiner can normally be reached on Monday-Friday 9am-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kimberly Nguyen can be reached on (571) 272-2402. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JMV/

/Bradley K Smith/

Primary Examiner, Art Unit 2894